

**US Army Corps  
of Engineers**  
Kansas City District

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**US Army Corps of Engineers-Kansas City District  
and  
Saline County Levee Drainage District  
Saline County, Missouri**

**NEPA Review  
Environmental Assessment & Finding of No Significant Impact**

**SALINE COUNTY LEVEE, NON-FEDERAL,  
EMERGENCY LEVEE REHABILITATION  
PROJECT**

**Saline County, Missouri**

**December 2008**



DEPARTMENT OF THE ARMY  
KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
700 FEDERAL BUILDING  
KANSAS CITY, MISSOURI 64106-2896

## **Draft Finding of No Significant Impact**

# **SALINE COUNTY, NON-FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT December 2008**

### **Summary**

The U.S. Army Corps of Engineers, Kansas City District (USACE), in cooperation with the project sponsor, Saline County Levee District, proposes to rehabilitate portions of the levee system that was damaged during a June 2008 flood event. The Saline County Levee is located near the town of Brunswick in Saline County, Missouri, along the right descending bank of the Missouri River, from river mile 251.8 to 246.0, with tieback levees along the left descending bank of an unnamed tributary and the right descending bank of Salt Branch Creek. Damage sustained during the flood included a severe riverward foreshore area failure (slide) at levee station 33+75 to 36+25. The slide area extends into portions of the riverside levee crown. The proposed project is authorized by Public Law 84-99. It would repair the levee to the previous level of flood protection prior to the June 2008 flood event by constructing an approximate 750 linear foot landward levee setback.

### **Alternatives**

A total of three alternatives were evaluated in terms of individual and cumulative effects for the proposed rehabilitation project, which are addressed below:

**Alternative 1 - Levee Setback (Recommended Plan):** This alternative would repair the levee damage with an approximate 750 linear foot landward levee setback, with maximum landward setback being approximately 100 feet from the original levee alignment. The landward setback will commence from existing station 31+75 and tie into to existing levee at station 39+45. In addition, approximately 750 linear feet of an existing gravel county road would require relocation immediately adjacent to the new levee setback.

**Alternative 2 - In-Place Repair:** This alternative would involve reshaping the existing levee and moving the levee crown landward approximately 10 feet. A trench would be excavated at the toe of the existing levee and filled with three feet of quarry-run stone to prevent erosion and provide stabilization. In addition, approximately 300 linear feet of an existing gravel county road would require relocation immediately adjacent to the levee repair.

**Alternative 3 - “No-Action” Alternative:** Under the “No-Action” Alternative, no repairs would be completed and the levee would be at an increased risk of failure during future flood events.

## **Summary of Environmental Impacts**

The flood risk management level achieved by the Recommended Plan would be the same as the original pre-flood condition. The Recommended Plan would not result in any impacts to Federally-listed threatened or endangered species or their designated critical habitat. Areas of the existing levee sections damaged by flooding would be temporarily disturbed by the proposed construction activity. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places. Temporary, short-term construction impacts to wildlife resources would be related to noise, visual disturbance, and the excavation of two acres of early successional woody growth from the borrow site. The adverse effects associated with the proposed project are short term/minor and are associated with project construction. Impacts to agricultural lands are minor and consist of one acre of prime farmland that would be returned to riverward floodplain due to the levee setback. These minor adverse effects would be greatly offset by restoring the levee flood risk management capability and its associated social and economic benefits, and restoring two acres of wetlands through borrow activity. Of the three alternatives considered, the Recommended Plan is economically justified, has the highest cost/benefit ratio, and is consistent with the protection of the human environment.

## **Mitigation Measures**

The Recommended Plan would not impact any existing wetlands and the borrow excavation is considered beneficial and would enhance the overall function and value of the aquatic ecosystem. Also, no mast producing trees are anticipated to be impacted by borrow or construction activities and natural plant succession should provide adequate re-vegetation to these construction areas. Therefore, no mitigation measures are proposed.

## **Public Availability**

Prior to a decision on whether to prepare an Environmental Impact Statement, the USACE circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated \_\_\_\_\_, 2008, with a thirty-day comment period ending on \_\_\_\_\_, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on the USACE Regulatory e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the USACE webpage or that they could request a hard copy of the EA and Draft FONSI in order to provide comment.

## **Conclusion**

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed rehabilitation project to repair damage to the Saline County Levee that occurred during the June 2008 flood event, does not constitute a major Federal action that would significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date: \_\_\_\_\_

\_\_\_\_\_  
Roger A. Wilson, Jr.  
Colonel, Corps of Engineers  
District Commander

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## **1.0 Introduction**

The U.S. Army Corps of Engineers, Kansas City District (USACE), in cooperation with the project sponsor, the Saline County Levee District, propose to conduct a levee rehabilitation project under the authority of Public Law 84-99 (FCA, 1941). This Environmental Assessment (EA) provides the necessary information to properly and fully assess the information that was developed during the public review of the proposed Saline County Levee Rehabilitation Project as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 et seq.); the President's Council of Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] 1500 – 1508) (CEQ, 1992); and US Army Corps of Engineers ER 200-2-2 (33 CFR 230) (USACE, 2008).

### **1.1 Purpose and Need for Action**

The proposed action is needed to repair damage to the Saline County Levee that occurred during a June 2008 flood event and reduce the risk of failure during future flood events. The damage sustained during the flood included a severe riverward foreshore area failure (slide) at levee station 33+75 to 36+25 which extends into portions of the riverside levee crown.

### **1.2 Project Location**

The project area is located near the town of Brunswick in Saline County, Missouri. The proposed levee repair is located at levee station 31+75 to 39+45 along the right descending bank of the Missouri River. The levee extends from river mile 251.8 to 246.0, with tieback levees along the left descending bank of an unnamed tributary and the right descending bank of Salt Branch creek (Lat. 39.37°, Long. -93.14°) (see Appendix I, Figure 1). The Saline County Levee protects approximately 3,200 total acres of which approximately 3,190 acres consists of agricultural production.

## **2.0 Recommended Plan and Alternatives**

**2.1 Alternative 1 - Levee Setback (Recommended Plan):** This alternative would repair the levee damage with an approximate 750 linear foot landward levee setback, with the maximum landward setback being approximately 100 feet from the original levee alignment as depicted in Appendix I, Figures 2 and 3. The landward setback would commence from existing station 31+75 and tie into the existing levee at station 39+45. In addition, approximately 750 linear feet of the existing landside county road would require relocation immediately adjacent to the new levee setback. This repair alternative would require approximately 5,600 cubic yards of fill, of which approximately 2,000 cubic yards would be obtained from a borrow site, and the remainder by degrading the existing levee.

The borrow fill would be obtained from a riverside area opposite levee station 55+00 (Appendix I, Figure 2) that was previously used for borrow during 1993 and 1995 levee

repair actions. The identification of this borrow site was completed in accordance with the Standard Operating Procedures (SOP) for the Selection of Borrow Sites Missouri River and Tributaries 1995 Levee Repair (USACE, 1995). These guidelines were developed through coordination with the U.S. Fish and Wildlife Service (USFWS) and the Missouri Department of Conservation (MDC) to avoid and/or minimize adverse impacts to the aquatic ecosystem to the greatest extent practicable, and where possible, take advantage of the borrow acquisition activity to enhance the aquatic ecosystem. Approximately two acres of borrow would be acquired as fill for repairs under the Recommended Plan.

**2.2 Alternative 2 - In-Place Repair:** This alternative would involve reshaping the existing levee to a one-foot vertical on two-foot horizontal slope. This would require an approximate 10-foot shift in the levee crown. A trench would be excavated at the toe of the existing levee and filled with three feet of quarry-run stone to prevent erosion and provide stabilization. In addition, approximately 300 linear feet of an existing gravel county road would require relocation immediately adjacent to the levee repair (Appendix I, Figures 2 and 3). This repair alternative would require 2,000 cubic yards of fill all of which would be obtained from a borrow site. Approximately two acres of borrow would be acquired, from the same borrow location as the Recommended Plan, as fill for repairs under this alternative.

**2.3 Alternative 3 - “No-Action” Alternative:** Under the “No-Action” Alternative, the USACE would not repair the damage to the levee caused by the June 2008 flood event.

### **3.0 Affected Environment**

The project area is located in Saline County, on the Missouri River floodplain between river miles 251.8 to 246.0. Most of the area consists of agricultural land in row crops with some limited riparian vegetation along the banks of the Missouri River and adjacent creeks. The project area disturbance involves approximately 5 acres or less (including the borrow location). Most of the project area is classified as prime farmland by the National Resources Conservation Service (NRCS). The Saline County Levee protects approximately 3,200 acres (3,190 acres in agricultural production) and several miles of county and local roads.

The borrow fill would be obtained from an old borrow area that was used for previous levee repairs in 1993 and 1995 and has revegetated with willow and cottonwood trees. This early successional woody vegetation has allowed sediment to accumulate in this borrow area.

Primary resources of concern identified during impact evaluation included: water quality, wetlands, terrestrial habitat, fish and wildlife, threatened and endangered species, floodplain, land use, economics, and archeological and historical resources.

## **4.0 Environmental Consequences (Impacts):**

### **4.1 Water Quality**

Alternative 1 - Levee Setback (Recommended Plan): This alternative may result in minor, temporary, construction-related adverse impacts to water quality resulting from site runoff and increased turbidity. However, these impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices (MDNR, 1998) and measures required under the National Pollutant Discharge Elimination System (NPDES) permit. Best management practices would minimize the potential adverse sedimentation into aquatic resources during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering into the waterway. Such measures would consist of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and erosion control measures used as required. A NPDES permit has been obtained for this project (see Appendix II). All appropriate measures will be taken to minimize erosion and storm water discharges during and after construction. Also, a Section 401 water quality certification for this project has been obtained (see Appendix II).

Alternative 2 - In-Place Repair: This alternative would result in potentially minor, temporary, construction related adverse impacts to water quality similar to those describe above. As with the Recommended Plan, these impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices as required under the National Pollutant Discharge Elimination System permit.

Alternative 3 - "No-Action" Alternative: In the absence of a Federal action addressing levee repair, a high water event could result in adverse impacts to water quality from increased levels of sediment runoff, nutrient loading and wastes, including the runoff of pollutants from agricultural pesticides, petroleum products, and non-point sources of human and animal wastes.

### **4.2 Wetlands**

Alternative 1 - Levee Setback (Recommended Plan): Under this alternative, no adverse impacts to any existing wetlands would occur. Previous borrow activity created wetland habitat at the old borrow site but this area has since revegetated with early successional woody vegetation and through the years has accumulated sediment. Clearing of early successional woody vegetation and excavation which removes accumulated sediment from historic wetlands is considered beneficial and will enhance the overall function and value of the aquatic ecosystem; therefore, the impacts to wetlands would be beneficial. Borrow excavation would be conducted in such a manner to restore two acres of wetland habitat and/or expand the existing adjacent shallow water habitat.



Alternative 2 - In-Place Repair: This alternative would result in the same impacts as those described under the Recommended Plan.

Alternative 3 - "No-Action" Alternative: The "No-Action" Alternative could increase areas of wetlands if levees are not repaired and lands are abandoned from farming due to more frequent future flooding.

#### **4.3 Terrestrial Habitat**

Alternative 1 - Levee Setback (Recommended Plan): This alternative would impact a very small amount of young trees (primarily cottonwood and willow saplings) that have revegetated the old borrow site. However, large timber would be avoided and no impacts to large mast-producing trees are anticipated. This borrow site will again be allowed to revegetate after construction is completed through natural plant succession. The proposed riverward levee setback would also provide an additional one acre of terrestrial habitat.

Alternative 2 - In-Place Repair: This alternative would result in the same impacts as those described under the Recommended Plan.

Alternative 3 - "No-Action" Alternative: The "No-Action" Alternative could increase areas of successional vegetative growth and terrestrial habitat if levees are not repaired and lands are abandoned from farming due to more frequent future flooding.

#### **4.4 Fish and Wildlife**

Alternative 1 - Levee Setback (Recommended Plan): This alternative would result in minor, temporary construction related impacts to fish and wildlife resources. The impacts to wildlife resources would be related to noise, visual disturbance, and the excavation of two acres of early successional woody growth from the borrow site. However, borrow activities would replace this early successional woody growth with shallow aquatic habitat for fish and wildlife. The impacts to fishery resources would be related to potential site runoff which would be avoided or otherwise minimized through the use of erosion control measures. The proposed riverward levee setback would provide an additional one acre of floodplain habitat for fish and wildlife.

Alternative 2 - In-Place Repair: This alternative would result similar impacts to fish and wildlife resources as those described under the Recommended Plan, except there would not be an increase in the existing floodplain habitat for fish and wildlife.

Alternative 3 - "No-Action" Alternative: This alternative would have minimal effects on fish and wildlife resources. These impacts would arise from flooding of the unprotected area if levees are allowed to further degrade and eventually fail. Wetland species may benefit as more frequent flooding could occur in the unprotected areas. Other terrestrial species could be temporarily displaced or have their habitat degraded by flooding.

#### 4.5 Threatened or Endangered Species

Alternative 1 - Levee Setback (Recommended Plan): The Recommended Plan would have no adverse effects on any Federally-listed threatened or endangered species or any designated critical habitat. Pallid sturgeons (*Scaphirhynchus albus*) are found primarily in the Missouri and Mississippi Rivers. No work is proposed within these rivers. No designated critical habitat for the Indiana bat (*Myotis sodalis*) is found in the project area, however, this species does roost in trees with exfoliating bark that tend to be greater than 9 inches dbh during the spring and summer, and hibernate in caves during the fall and winter. The borrow area has revegetated with willow and cottonwood trees some of which are greater than 9-inch dbh. According to the USFWS Columbia, MO Ecological Field Services Office, the clearing of trees to facilitate the construction of the levee repair that meet the criteria for potential Indiana bat habitat needs to occur during their wintering period between October 1 and April 1. If tree clearing is not conducted within this timeframe, the Corps will coordinate with the USFWS to determine the presence/absence of the Indiana bat prior to the initiation of any tree clearing activities. The USACE will make every effort to avoid trees larger than 9 inches dbh, and any unavoidable areas would be either cleared during the winter, when bats are not in the area, or visually surveyed just prior to construction to insure that Indiana bats are not using the area. Therefore, the Recommended Plan would not impact Indiana bats or any designated critical habitat. No impacts to any state listed threatened or endangered species or their habitat were identified.

Alternative 2 - In-Place Repair: This alternative also would have no impacts to any Federally-listed threatened or endangered species or their designated critical habitat.

Alternative 3 - "No-Action" Alternative: There would be no impacts to endangered or threatened species under the "No-Action" Alternative.

#### 4.6 Floodplain

Alternative 1 - Levee Setback (Recommended Plan): This alternative would maintain the 9-yr level of flood protection to the existing levee system. The proposed action would not directly or indirectly support more development in the floodplain or encourage additional occupancy and/or modification of the base floodplain. Furthermore, the Corps has determined that the Recommended Plan complies with the intent of Executive Order 11988.

Alternative 2 - In-Place Repair: This alternative would result in similar protection as described above for the Recommended Plan.

Alternative 3 - "No-Action" Alternative: The alternative would allow the levee to further degrade and eventually fail exposing all public and private infrastructure protected by the levee to a high level risk of future flooding.

## **4.7 Land Use**

Alternative 1 - Levee Setback (Recommended Plan): This alternative would result in maintaining the 9-year level of protection that the Saline County Levee provides for the existing 3,190 acres of prime farmland and the public and private infrastructure in the area. A minor, long-term impact to land use would be the conversion of approximately one acre of prime farmland to floodplain habitat, due to the landward levee setback.

Alternative 2 - In-Place Repair: No impacts would occur to land use with this alternative since there would be no levee setback and no conversion of prime farmland...

Alternative 3 - "No-Action" Alternative: This alternative could adversely impact prime farmland, and existing public and private infrastructure, by increasing the area's risk of flooding. This could cause the loss of prime farmland and some loss of public and private infrastructure.

## **4.8 Economics**

Alternative 1 - Levee Setback (Recommended Plan): Under this alternative, the levee would maintain its 9-year level of flood protection. Public and private infrastructure protected by the levee prior to the flood damage would continue to be protected against a 9-year flood event. Economic conditions are unlikely to change from those of pre-damage levee conditions with the repair of this levee system.

Alternative 2 - In-Place Repair: This alternative would result in similar protections as described above for the Recommended Plan. However, this alternative is less cost effective than the Recommended Plan.

Alternative 3 - "No-Action" Alternative: The "No-Action" Alternative has a zero benefit to cost ratio and would eventually expose all public and private infrastructure and agricultural land protected by the levee to a high level risk of future flooding if the levee is allowed to further degrade and eventually fail. People's livelihood and social well-being would be disrupted and be subjected to the continuous threat of flooding. Failure to reconstruct the levee could adversely affect land values and the tax base of the county, municipal governments, and special districts such as school districts. In addition, there would be a loss in agricultural production and a loss of jobs in the area.

## **4.9 Archeological and Historical Resources**

Alternative 1 - Levee Setback (Recommended Plan): The Recommended Plan would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places (NRHP). A background check of the NRHP and site location maps identified no previously recorded sites within or near the proposed project areas. In a letter to the State Historic Preservation Officer, (SHPO), the USACE determined that the project would have no effect on historic properties and that the project should be

allowed to proceed. The SHPO concurred with this recommendation on October 3, 2008 (Appendix II). Further, this project would be coordinated with appropriate federally recognized Native American tribes (Tribes). If in the unlikely event that archeological material is discovered during project construction, work in the area of discovery would cease until the discovery is investigated by a qualified archeologist, and coordinated with the SHPO and the Tribes.

**Alternative 2 - In-Place Repair:** This alternative would have the same impacts as those described under the Recommended Plan.

**Alternative 3 - "No-Action" Alternative:** No effects to archaeological or historical resources would result from the "No-Action" Alternative.

## **5.0 Cumulative Impacts**

The Council on Environmental Quality Regulations defines cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (CEQ, 1997).

The cumulative impacts addressed in this document consist of the impacts of multiple actions that each affect the human environment including those that contribute to wetland losses and the clearing/conversion of riparian habitat to agricultural lands and development. The geographical areas of consideration are actions located within/along the Missouri River floodplain.

The Missouri River and its floodplain has been altered by past actions such as bank stabilization, dams on the river and its tributaries, roads/bridges, agricultural and urban levees, channelization, farming, water withdrawal for human and agricultural use, urbanization and other human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the Missouri River watershed. Some examples of the alterations that have occurred include: wetland losses, development of the floodplain, conversion of riparian habitat to agriculture and development, and the cut-off of the floodplain from the river.

The proposed project would involve repairs to the Saline County Levee system, which is located in Saline County, Missouri and would include repairs to a severe riverside foreshore/toe slope failure/slide that was damaged during the June 2008 flood. Relatively minor adverse impacts to the natural environment are anticipated with overall positive benefits to the socio-economic environment by restoring the levee flood risk management capability, and enhancing the aquatic ecosystem through borrow activity. It is important to note that existing condition of the natural environment along the Missouri River has been historically altered by past actions.

The USACE, under the authority of the Public Law 84-99 has and will continue to provide rehabilitation assistance to Federal and non-Federal levee sponsors along the Missouri River which participate in the Public Law 84-99 Program. The rehabilitation of these levees usually consists of repairs through minor levee setbacks, and repairing existing structures to their previous condition. These projects typically result in minor short-term construction related impacts to agricultural lands, wetlands, fish and wildlife and the habitats upon which they depend. However, cumulatively, these minor adverse affects are out-weighed by the long-term beneficial effects of the enhancement of the aquatic ecosystem through borrow activity, reconnecting the floodplain to the water resources through levee setbacks, and positive benefits to the socio-economic environment by restoring the levee flood risk management capability.

The USACE, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States including the Missouri River and its tributaries. Of the reasonably foreseeable projects and associated impacts that would be expected to occur, future development of the floodplain would probably have the greatest impact on these resources in the future. Because this project will merely restore the levee to its pre-existing state, it should not induce such development in any substantial way. The possibility of wetland conversion and the clearing of riparian habitat are ever present, and these activities also tend to impact these resources. Most of the floodplain is already protected by either agricultural levees, in rural areas, or urban levees, in metropolitan areas. There is a trend towards converting agricultural levees to urban levees as metropolitan areas continue to grow. Significant, environmental restoration efforts are occurring on the Missouri River and flood protection has been removed and natural floodplain habitat restored, in some areas. No new major reservoir construction is likely on the Missouri River or its' tributaries in the foreseeable future.

The cumulative impacts of proposed action when added to other present and future actions and even when added to the past degradation actions on the Missouri River do not result in a net increase because the proposed action does not result in an addition to flood heights or reduced floodplain area. Instead, they are merely a form of maintenance of that which had previously existed. In addition, the minor, short-term adverse affects on natural resources are out-weighed by the long-term beneficial effects associated with the of the enhancement of the aquatic ecosystem through borrow activity, reconnecting the floodplain through levee setbacks, and restoring the levee flood risk management capability. Thus, no significant cumulative impacts associated with the proposed rehabilitation of the existing levee system have been identified.

## **6.0 Conclusion**

The flood risk management level achieved by the Recommended Plan would be the same as the original pre-flood condition. The Recommended Plan would result in no impacts to any Federally-listed threatened or endangered species or their designated

critical habitat. Areas of the existing levee sections damaged by flooding would be temporarily disturbed by the proposed construction activity. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places. Temporary, short-term construction impacts to terrestrial habitat and wildlife resources would be related to noise, visual disturbance, and the excavation of two acres of early successional woody growth from the borrow site. The adverse effects associated with the proposed project are short term/minor and are associated with project construction. Impacts to agricultural lands are minor and consist of one acre of prime farmland that would be returned to the riverward floodplain due to the levee setback. These minor adverse effects would be greatly offset by restoring the levee flood risk management capability and its associated social and economic benefits, and enhancing the aquatic ecosystem through borrow activity. Of the three alternatives considered, the Recommended Plan is economically justified, has the highest cost/benefit ratio, and is consistent with the protection of the human environment

## **7.0 Coordination and Comments**

This draft EA and FONSI will be e-mailed to individuals, agencies, and businesses contained on the USACE Regulatory public notice list. This document will also be available on the USACE Regulatory webpage at the link below. Hard copies of the draft EA and FONSI are available upon request. All substantive comments will be addressed in this section of the final EA.

[http://www.nwk.usace.army.mil/regulatory/public\\_notices.htm](http://www.nwk.usace.army.mil/regulatory/public_notices.htm).

## 8.0 Agency Compliance with Other Environmental Laws

Compliance with other environmental laws is listed below.

<b>Federal Polices</b>	<b>Compliance</b>
Archeological Resources Protection Act, 16 U.S.C. 470, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S. C. 7401-7671g, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Federal Water Project Recreation Act, 16 U.S.C. 4601-12, et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full Compliance
Land and Water Conservation Fund Act, 16 U.S.C. 4601-4, et seq.	Not Applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470a, et seq.	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Full Compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full Compliance
Wild and Scenic River Act, 16 U.S.C. 1271, et seq.	Not Applicable
Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.	Full Compliance
Protection & Enhancement of the Cultural Environment (Executive Order 11593)	Full Compliance
Floodplain Management (Executive Order 11988)	Full Compliance
Protection of Wetlands (Executive Order 11990)	Full Compliance
Environmental Justice (Executive Order 12898)	Full Compliance

### NOTES:

- a. Full compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or post authorization).
- b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
- c. Noncompliance. Violation of a requirement of the statute.
- d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

## **9.0 References**

- Council on Environmental Quality (CEQ). 1992. Regulations for Implementing the Procedural Provisions of NEPA, 40 CFR Parts 1500-1508, in accordance with 40 CFR 1507.3.
- CEQ. 1997. January, 1997. Considering Cumulative Effects Under the National Environmental Policy Act. Executive Office of the President, Washington, D.C. pp ix-x, 28-29 and 49-57.
- FCA. 1941. Flood Control Act of 1941, 33 U.S.C. 701n, as amended (commonly referred to as Public Law 84-99, Flood Control and Coastal Emergencies Act).
- Missouri Department of Natural Resources (MDNR). 1998. Protecting Water Quality: A field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas.  
<http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm>
- USACE. 1995. Standard Operating Procedures for the Selection of Borrow Sites: Missouri River and Tributaries, 1995 Levee Repair. Kansas City District.
- USACE. 2008. Procedures for Implementing the National Environmental Policy Act. Engineer Regulations (ER) 200-2-2. 33 CFR 230.

## **10.0 List of Preparers**

This EA and draft FONSI were prepared by Ms. Lekesha Reynolds, Environmental Resource Specialist, with cultural resource assistance provided by Mr. Timothy Meade, District Archeologist. The address of the preparers is: U.S. Army Corps of Engineers, Kansas City, District; PM-PR, Room 843, 601 E. 12<sup>th</sup> Street, Kansas City, Missouri 64106.

## **11.0 Appendices**



## **APPENDIX I - PROJECT DRAWINGS**

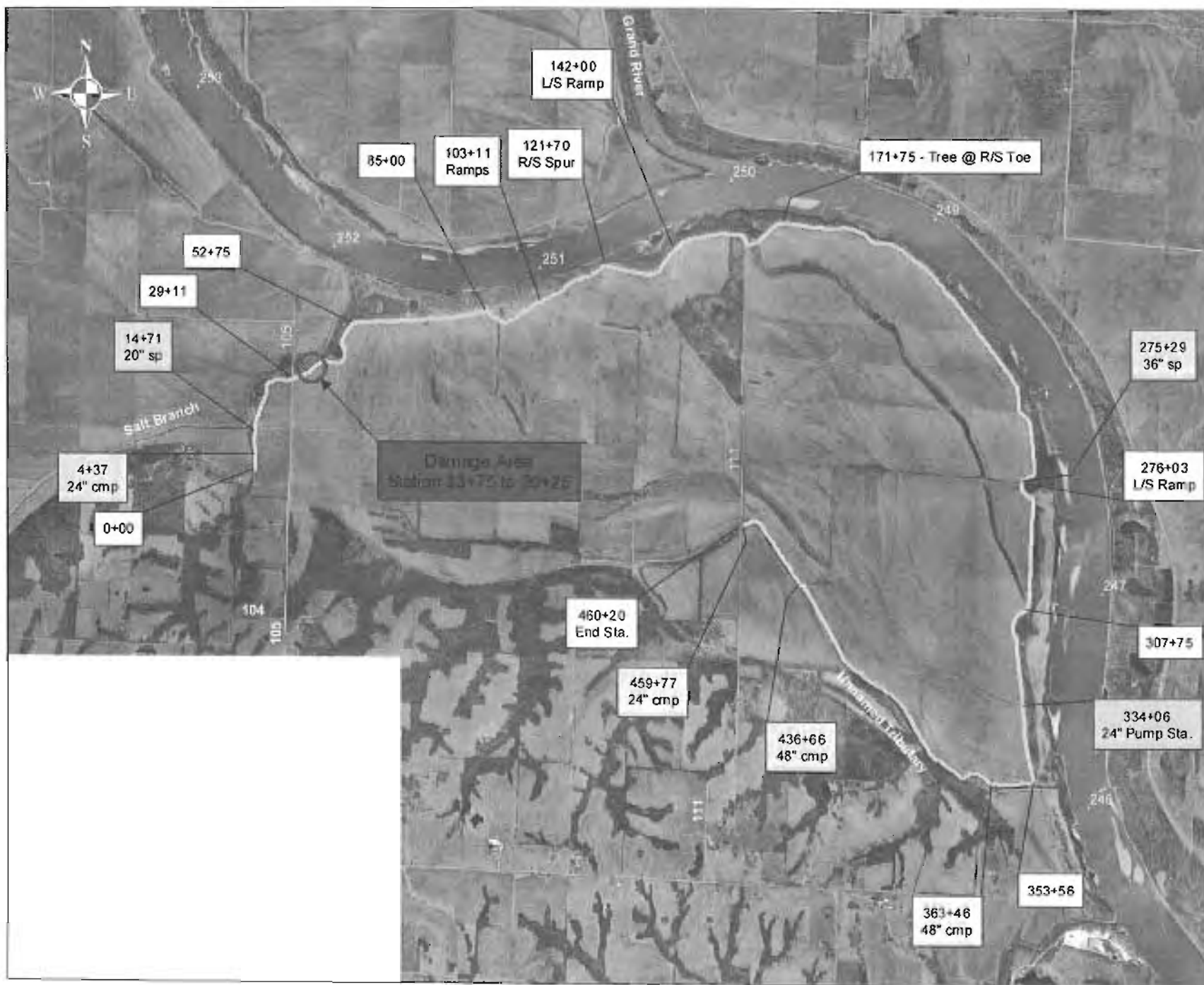


Figure 1

Item 58C  
Saline County Levee District No. 2

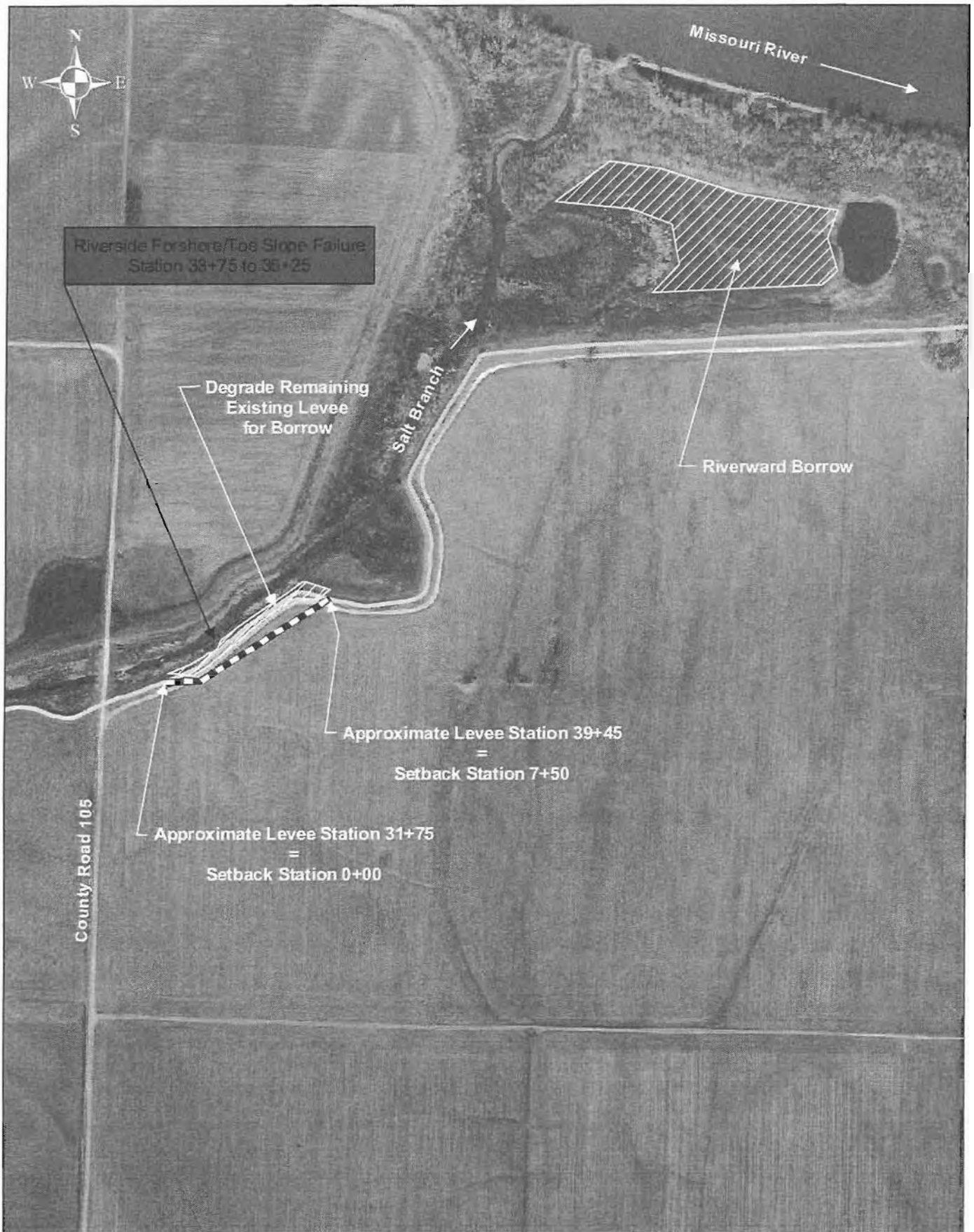
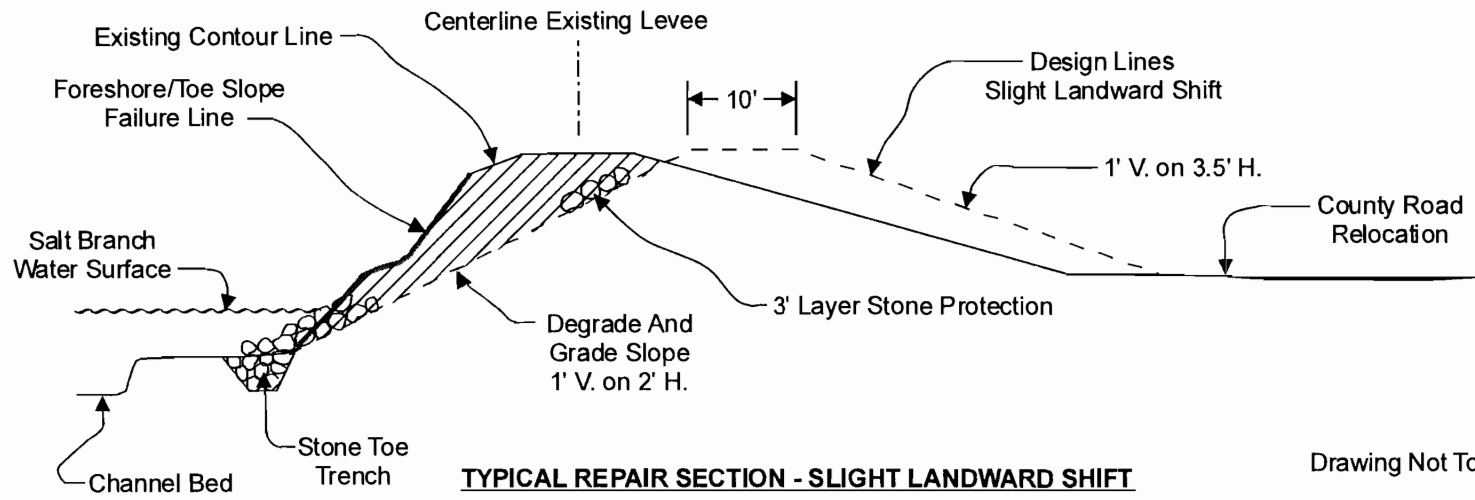
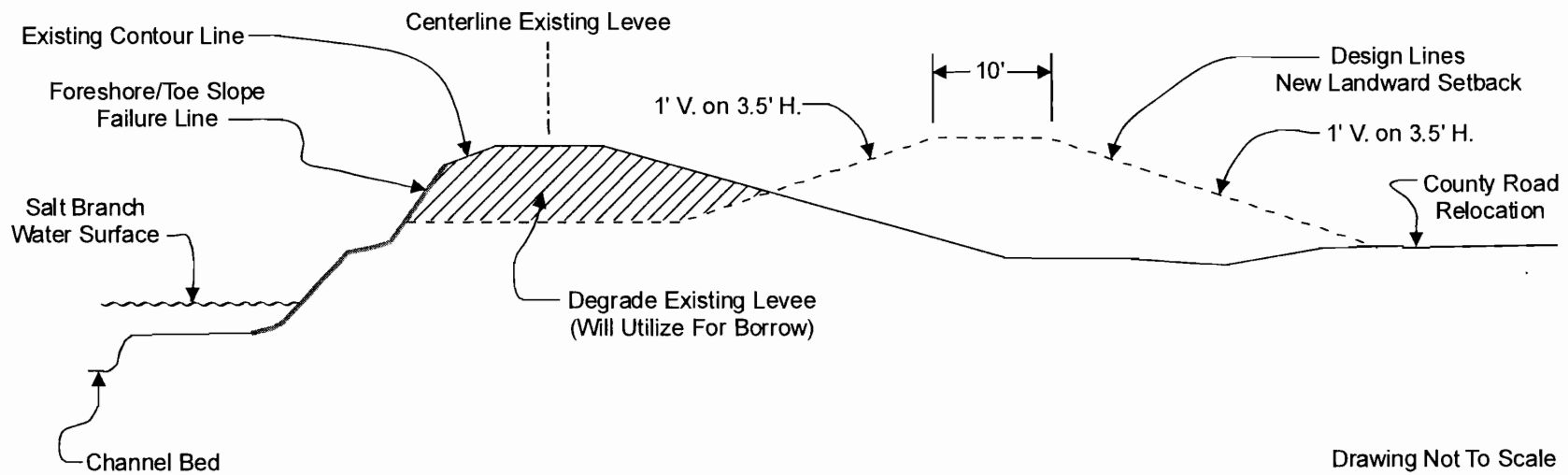


Figure 2



Drawing Not To Scale

(Not Recommended)



Drawing Not To Scale

(Recommended)

## **APPENDIX II - NEPA REVIEW**

# **Missouri National Pollutant Discharge Elimination System (NPDES) Permit**

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT  
WATER POLLUTION CONTROL PROGRAM**

**General Operating Permit**

In compliance with the Missouri Clean Water Law, (chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-R100043

Owner: U.S. Army Corps of Engineers, KC District  
Address: 700 Federal Building, 601 E. 12th Street  
Kansas City, MO 64106

Continuing Authority: Same  
Same

Facility Name: U.S. Army Corps of Engineers, KC District  
Facility Address: 700 Federal Building, 601 E. 12th Street  
Kansas City, MO 64106

Legal Description: See Page 2, Various County

Receiving Stream: See Page 2  
First Classified Stream: See Page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

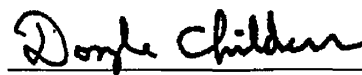
**FACILITY DESCRIPTION** All Outfalls, SIC 1629

Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone) that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program for land disturbance activities that has been approved by the Missouri Department of Natural Resources.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law

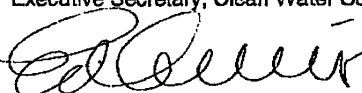
May 31, 2007  
Effective date

November 30, 2007  
Issue date



Doyle Childers, Director, Department of Natural Resources  
Executive Secretary, Clean Water Commission

May 30, 2012  
Expiration date  
MO 780-1481 (7-94)



Edward Galbraith  
Director of Staff, Clean Water Commission

Page 2

Permit Number MO-R100043

This permit accompanies the applicant's General Permit 41 (GP0-41) for the repair of levees due to damages from flooding.

Repair activities may take place anywhere along the Missouri and Grand Rivers and tributaries thereof. Location would be in any county along these waterways from Rulo Nebraska to Saint Louis Missouri.

Detailed receiving stream information is available upon request.



## APPLICABILITY

1. This general permit **authorizes** the discharge of storm water and certain non-storm water discharges from land disturbance sites that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program and/or SWPPP for land disturbance activities that has been approved by the Missouri Department of Natural Resources.
2. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of a permitted site to apply for site specific permits, the Department may require a city, county, or other governmental jurisdiction to obtain a site specific operating permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(6)].

The Department may require the permittee to apply for and obtain a site specific or different general permit if:

- a. The permittee is not in compliance with the conditions of this general permit;
- b. The discharge no longer qualifies for this general permit due to changed site conditions and regulations; or
- c. Information becomes available that indicates water quality standards have been or may be violated.

The Department will notify the permittee in writing if there is a need to apply for a site-specific permit or a different general permit. When a site specific permit or different general permit is issued to the authorized permittee, the permit that has been replaced will be automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be. The permittee shall submit the appropriate forms to the Department to terminate the permit that has been replaced.

3. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site-specific permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(6)].
4. The owner of the property and/or right-of-way on which a land disturbance site is located is responsible for compliance with this permit. This remains true in the event the owner chooses to contract for the design and/or construction of a project.
5. This permit does not authorize land disturbance activities in violation of the Historic Preservation Act or the Endangered Species Act.
6. This permit is not transferable to other owners or operators.

## EXEMPTIONS FROM STATE PERMIT REQUIREMENTS

1. Sites that discharge all storm water runoff directly to a combined sewer system are exempt from state storm water permit requirements.
2. Land disturbance activities as identified in 10 CSR 20-6.200(1)(B) are exempt from state storm water permit requirements as long as there is no violation of water quality standards.
3. Sites that disturb less than one acre of total land area that are not part of a common plan or sale are exempt from state storm water requirements as long as there is no violation of water quality standards.
4. Agricultural storm water discharges and irrigation return flows are exempt from state storm water permit requirements as long as there is no violation of water quality standards. Animal Feeding Operations (AFO) are not included in the agricultural exemption.

## REQUIREMENTS

1. All water pollution controls on site shall conform to the DNR-approved storm water control program and/or SWPPP of the city, county, or other governmental jurisdiction in which such land disturbance activities are occurring. The requirements of the approved storm water control program and/or SWPPP must be at least as stringent and may be more stringent than those described in this permit and 10 CSR 20-6.200. The requirements of the DNR approved program and/or SWPPP are enforceable under this permit. The permittee must conduct inspections of all land disturbance sites as described under Requirements, 12. of this permit. If the permittee is a regulated MS4, the approved program and/or SWPPP must comply with the Permittee's MS4 permit.
2. The permittee shall provide a list of active land disturbance sites (of one acre or more) to the department on a quarterly basis. The list shall contain the name of the project, location, receiving stream(s) for each outfall, description of the project, number of acres disturbed, and projected date for completion of the project. The permittee shall submit quarterly reports each January, April, July, and October. The reports must be received by the end of the specified month.
3. Discharges shall not cause violations of the Water Quality Standards 10 CSR 20-7.031(3), which states, in part, that no water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - a. Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - b. Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - c. Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - d. Waters shall be free from substances or conditions in sufficient amounts to have a harmful effect on human, animal or aquatic life.
  - e. There shall be no significant human health hazard from incidental contact with the water;
  - f. There shall be no acute toxicity to livestock or wildlife watering;
  - g. Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - h. Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles, or equipment and solid waste as defined in Missouri's Solid Waste Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Section 260.200-260.247.
4. Good housekeeping practices shall be maintained by the permittee to keep solid waste from entering waters of the state.
5. The permittee shall comply with all federal and state regulations regarding underground storage, above ground storage, and dispensers of fueling facilities.
6. The permittee shall manage hazardous wastes in accordance with the provisions of the Missouri Hazardous Waste Laws and Regulations. This includes hazardous wastes that are transported, stored, or used for maintenance, cleaning, and repair.
7. The permittee shall designate an individual to be responsible for environmental matters. The individual responsible for environmental matters shall have a thorough and demonstrable knowledge of the site's SWPPP and sediment and erosion control practices in general. The individual responsible for environmental matters or a designated inspector knowledgeable in erosion, sediment, and stormwater control principles, shall inspect all structures that function to prevent pollution of waters of the state.

8. The permittee shall store all paint, solvents, petroleum products and petroleum waste products, and storage containers (such as drums, cans, or cartons) according to best management practices (BMPs). The materials exposed to precipitation shall be stored in watertight, structurally sound, closed containers. All containers shall be inspected for leaks or spillage during the once per week inspection of BMPs.
9. The primary requirement of this permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The permittee must retain a copy of the SWPPP on the construction site during normal working hours and make it available to a department representative upon request.

The SWPPP shall:

- a. Incorporate required practices identified below,
- b. Incorporate erosion control practices specific to site conditions, and
- c. Provide for maintenance and adherence to the plan.

Before any land disturbance activity takes place, the permittee shall develop a SWPPP. This plan must be developed before a permit can be issued and made available as specified under RECORDS

The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this general permit throughout the term of the land disturbance project.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the land disturbance activities; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this general permit.

The permittee shall select, install, use, operate, and maintain appropriate BMPs for the permitted sites. The following manuals are acceptable resources for the selection of appropriate BMPs.

***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in 1992. **This manual is available at The USEPA internet site <http://cfpub1.epa.gov/npdes/stormwater/swppp.cfm>;**

The latest version of ***Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri***. **This manual is available on the department's internet site at: <http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm>**

The permittee is not limited to the use of these guidance manuals. Other guidance publications may be used to select appropriate BMPs. However, all BMPs should be described and justified in the SWPPP. EPA and DNR continue to update BMP information on their web sites. It is recommended that the permittee review this information when developing a SWPPP.

10. SWPPP Requirements: The following information and practices shall be provided for in the SWPPP.
  - a. **Site Description:** In order to identify the site, the SWPPP shall include the facility and outfall information provided in the application form. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs. Site boundaries and outfalls shall be marked on a site map included as part of the SWPPP.
  - b. **Selection of Temporary and Permanent Non-Structural BMPs:** The permittee shall select appropriate non-structural BMPs for use at the site and list them in the SWPPP. The SWPPP shall require existing vegetation to be preserved where practical. The time period for disturbed areas to be without vegetative cover is to be minimized to the maximum extent practicable. For sites that will be inactive six months or more, establishing a vegetative cover is a highly recommended choice for a proper BMP.

Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include: preservation of trees and mature vegetation, protection of existing vegetation for use as buffer strips (vegetative buffer strips of 50 feet are especially encourage along drainage courses), mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits, and other appropriate BMPs.

- c. Selection of Temporary and Permanent Structural BMPs: The permittee shall select appropriate structural BMPs for use at the site and list them in the SWPPP. Examples of structural BMPs that the permittee should consider specifying in the SWPPP include: diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric and/or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins, and other appropriate BMPs.
- d. Description of Best Management Practices: The SWPPP shall include a description of both structural and non-structural BMPs that will be used at the site. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:
  - i. Physical description of the BMP,
  - ii. Site and physical conditions that must be met for effective use of the BMP,
  - iii. BMP installation/construction procedures, including typical drawings, and
  - iv. Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

- vi. Whether the BMP is temporary or permanent,
  - vii. Where, in relation to other site features, the BMP is to be located,
  - viii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project, and
  - viii. What site conditions must be met before removal of the BMP if the BMP is not a permanent BMP.
- e. Discharges to Valuable Resource Waters:

Storm water discharges as described in 10.e.1, 10.e.2, and 10.e.3 shall be considered discharges to “valuable resource waters”.

- 1. Storm water discharges within 1000 stream feet of: Streams identified as a losing stream\*,
  - i. Streams or lakes listed as an outstanding national or state resource water\*,
  - ii. Reservoirs or lakes used for public drinking water supplies\*; or
  - iii. Streams, lakes or reservoirs identified as critical habitat for endangered species\*;
  - iv. Streams, lakes, or reservoirs listed as impaired for sediment and/or an unknown pollutant by standard MDNR methodology.\*
- 2. Storm water discharges:
  - i. Within 100 stream feet of a permanent stream (class P) or major reservoir (class L2)\*, or
  - ii. Within two stream miles upstream of biocriteria reference locations\*.
- 3. Storm water discharges where:
  - i. Any of the disturbed area is defined as a wetland (Class W), by 10 CSR 20-7.031(1)(F)7\*;or
  - ii. The storm water discharges to a sinkhole or other direct conduit to groundwater.

- f. Total Settable Solids from a storm water outfall must not exceed 2.5 ml/L/hr.
- g. If the disturbed area discharges to a valuable resource water, Total Settable Solids shall not exceed 0.5 ml/L/hr,

(For the purpose of this permit, the term "stream feet" shall mean the distance in feet following the nearest drainage channel from the land disturbance to the valuable resource water.)

\* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR by calling the Water Pollution Control Program at (573)751-1300. The regulations are also available from the Missouri Secretary of States Office.

- h. Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. A site map or maps, defining the sloped areas for all phases of the project, must be included in the SWPPP. Where soil disturbing activities cease in an area for 14 days or more, the permittee shall construct BMPs to establish interim stabilization. Interim stabilization shall consist of well established and maintained BMPs that are reasonably certain to protect waters of the state from sediment pollution. These BMPs may include a combination of sediment basins, check dams, sediment fences, and mulch. The types of BMPs used must be suited to the area disturbed, taking into account the number of acres exposed and the steepness of the slopes. If the slope of the area is greater than 3:1 (3 feet horizontal to 1 foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, then the permittee must establish interim stabilization within 7 days of ceasing operations on that part of the site. Delays in work caused by inclement weather or equipment malfunction are not considered "ceasing operations" for the purpose of this section, as long as work resumes as soon as possible.
- i. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Storm water discharges from disturbed areas, which leave the site, shall pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, silt fences, etc. prior to leaving the land disturbance site. A drainage course change shall be clearly marked on a site map and described in the SWPPP. The location of all BMPs must be indicated on a site map, included in the SWPPP.
- j. Sedimentation Basins: The SWPPP shall require a sedimentation basin for each drainage area with 10 or more acres disturbed at one time. The sedimentation basin shall be sized to contain a volume of at least 3600 cubic feet per each disturbed acre draining thereto. Accumulated sediment shall be removed from the basin as needed to ensure the minimum volume of 3600 cubic feet is maintained. Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream. The SWPPP shall require the basin be maintained until final stabilization of the disturbed area served by the basin.

Where use of a sediment basin of this size is impractical, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment delivery. These similarly effective BMPs shall be selected from appropriate BMP guidance documents authorized by this permit. The BMPs must provide equivalent protection. The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

- k. Dewatering: The SWPPP shall require a description of any anticipated dewatering methods, including the anticipated volume of water to be discharged and the anticipated maximum flow discharged from these dewatering activities, expressed in gallons per minute. Maximum flow may be stated in the SWPPP as an estimate based on the type and capacity of equipment being used for dewatering. The SWPPP shall call for specific BMPs designed to treat water pumped from excavations and in no case shall this water be pumped off site without being treated by the specified BMPs.
- l. Roadways: Where applicable, upon installation of or connection to roadways, all efforts should be made to prevent the deposition of earth and sediment onto roadways through the use of proper BMPs. Where sediment is present on roadways all storm water curb inlets shall have inlet protection. Where storm water will flow off the end of where a roadway terminates, a sediment catching BMP (ex. gravel berm, silt fence, etc.) shall be provided. Roadways and curb inlets shall be cleaned weekly or following a rainfall that generates a run-off. Stabilized construction entrances shall be used to prevent sediment trackout.

11. Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity. The permittee shall amend the SWPPP, at a minimum, whenever the:
  - a. Design, operation, or maintenance of BMPs is changed;
  - b. Design of the construction project is changed that could significantly affect the quality of the storm water discharges;
  - c. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
  - d. MDNR notifies the permittee in writing of deficiencies in the SWPPP;
  - e. SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes);
  - f. Total Settleable Solids from a storm water outfall exceed 2.5 mg/L/hr (or 0.5 mg/L/hr if discharged to a valuable resource water);
  - g. MDNR determines violations of Water Quality Standards may occur or have occurred.
12. Site Inspections Reports: Regularly scheduled inspections shall be at a minimum once per seven calendar days. These inspections shall be conducted by the person responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All storm water outfalls shall be inspected for evidence of erosion or sediment deposition. The receiving stream shall also be inspected for 50 feet downstream of the outfall. Any problems shall be noted in an inspection report and corrected within seven calendar days of the inspection. If a rainfall causes storm water runoff to occur on site, the BMPs must be inspected within a reasonable time period (not to exceed 48 hours). The SWPPP must explain how the person responsible for erosion control, will be notified when storm water runoff occurs. If weather conditions make it impossible to correct the problem within seven days, a detailed report of the problem(including pictures), must be filed with the regular inspection reports. The permittee shall correct BMP malfunctions as soon as weather conditions allow. Parts of the site that have been finally stabilized may be inspected once per month. (A once per month inspection schedule may be implemented for a site with interim stabilization if the permittee makes a written request for the schedule and it is approved by the Department.)A log of each inspection shall be kept. The inspection report is to include the following minimum information: inspector's name, date of inspection, observations relative to the effectiveness of the BMPs, actions taken or necessary to correct problems, and listing of areas where land disturbance operations have permanently or temporarily stopped. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.
13. Proper Operation and Maintenance: The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this general permit.
14. Public Notification: The permittee shall post a copy of the public notification sign described by the department on the information board at the main entrance to the site. The public notification sign must remain posted at the site until the site has been finally stabilized.

#### OTHER DISCHARGES

1. Hazardous Substance and Oil Spill Reporting: Refer to Section B, #14 of Part I of the Standard Conditions that accompany this permit.
2. Removed substances: Refer to Section B, #6 of Part I of the Standard Conditions that accompany this permit.
3. Change in discharge: In the event soil contamination or hazardous substances are discovered at the site during land disturbance activities, the permittee shall notify the MDNR regional office by telephone as soon as practicable and no later than 24 hours after discovery. The permittee must also notify the MDNR regional office in writing no later than 14 calendar days after discovery.

### SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

1. Discharges shall not violate Water Quality Standards 10 CSR 20-7.031(3). Total Settable Solids shall not exceed a maximum of 2.5 ml/L/hr. for each storm water outfall. If there is a discharge to valuable resource waters, Total Settable Solids shall not exceed a maximum of 0.5 ml/L/hr.
2. There are no regular sampling requirements in this permit. However, the Department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of off-site contamination from activities at the site. If such an action is needed, the Department will specify in writing any additional sampling requirements, including such information as location, extent, and parameters.

### RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis, and all site inspection records required by this general permit. The records shall be accessible during normal business hours. The records shall be retained for a period of at least three years from the date of the Letter of Termination.
2. The permittee shall provide a copy of the SWPPP to MDNR, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.
3. The permittee shall provide those who are responsible for installation, operation, or maintenance of any BMP a copy of the SWPPP.
4. The permittee, their representative, and/or the contractor(s) responsible for installation, operation, and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

### TERMINATION

This permit may be terminated upon the request of the applicant when all sites have been stabilized. A site is considered to be stabilized when either perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetative cover shall be at least 70% of fully established plant density over 100% of the disturbed area.

In order to terminate the permit, the permittee shall notify MDNR by submitting Form H,

included with the State Operating Permit. The permittee shall complete Form H and mail it to MDNR at the address noted in the cover letter of this permit.

This general permit will expire five years from the effective date of the permit (see page 1). The issue date is the date the State Operating Permit is issued to the applicant. The expiration date may or may not coincide with the date when the authorized project or development is scheduled for completion.

If the project or development completion date will be after the expiration date of this general permit, then the permittee must reapply to the department for the permit to be re-issued. The permittee will receive notification of the expiration date of the permit before the expiration date listed on page 1 of this permit. In order for the permit to be re-issued, the permittee should submit the appropriate application form(s) at least 180 days before the expiration of the permit if land disturbance activity is expected to continue past the expiration date of this general permit.

If the permittee does not apply for the renewal of this permit, this permit will automatically terminate on the expiration date. Continued discharges from a site that has not been fully stabilized are prohibited beyond the expiration date; unless the permit is reissued or the permittee has filed a timely application for the reissuance of this permit.

DUTY TO COMPLY

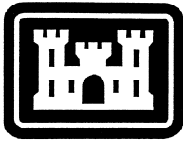
The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

MAILING ADDRESS



**General Permit - No. 41  
and  
Section 401 Water Quality Certification**

# PUBLIC NOTICE



**US Army Corps  
of Engineers  
Kansas City District**

**Permit No. GP-41 (2007-2078)**

**Issue Date: March 21, 2008**

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**STATES OF MISSOURI AND KANSAS - Including INDIAN COUNTRY  
ISSUANCE OF GENERAL PERMIT (GP) 41  
FLOOD RECOVERY AND REPAIR ACTIVITIES**

The U.S. Army Corps of Engineers, Kansas City District **HAS ISSUED** GP-41 (copy enclosed) for protection and repair of existing flood damaged structures, damaged land areas and damaged fills, under authority of Section 10 of the Rivers and Harbors Act of 1988 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

**Duration of this General Permit:** This GP is issued and is in effect for five (5) years, from March 21, 2008 until March 21, 2013, unless revoked or specifically extended.

**Notification Procedures (Post and Preconstruction):** Preconstruction notification is required by the General Public for all activities involving obtaining borrow from forested wetlands, borrowing material from potential migratory bird nesting areas, clearing trees along stream channels, working in areas with known exotic species, and/or if the proposed repair activity includes restoration of a stream channel back to the original, pre-flood location. Other authorized activities that meet the terms and limits of this GP may proceed without preconstruction notification to the Corps of Engineers. However, post construction reporting is required for all activities undertaken under this GP. See GP Special condition "d" and Appendix I for more information on notification requirements.

**APPLICANT:** General Public

**PROJECT LOCATION:** In waters of the United States in the States of Missouri and Kansas, including Indian Country within Kansas boundaries that are declared flood disaster areas by the Governor of either state and/or the President of the United States of America.

**AUTHORITY:** Section 10 of the Rivers and Harbors Act of 1988 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

**ACTIVITY:** Excavation or placement of fill material for protection and/or repair of existing flood damaged structures, damaged land areas and/or damaged fills as follows: a. Repair of levees to existing elevations and cross-section, including breach closures and borrow operations, b. Bridge embankment protection (armoring) and/or repair, c. Repair of pre-existing highway or railroad embankments and the addition or repair of stone (armoring) protection, d. Repair of pre-existing utility protection structures, e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration, f. Drainage channel/ditch restoration to

pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event, g. Restoration of creek channels to pre-flooding alignment and capacity, and h. Construction of temporary roads and temporary fills to facilitate the completion of any of the listed activities.

Note: Maintenance of existing flood damaged structures and/or flood damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal regulations 33 CFR 320-331. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the appropriate Corps of Engineers District, Regulatory Branch.

**INDIAN COUNTRY:** Work under this permit is not authorized in Indian Country until the applicant obtains individual Section 401 Water Quality Certification from the U.S. Environmental Protection Agency (EPA), Region VII, Watershed Planning and Implementation Branch, 901 North 5<sup>th</sup> Street, Kansas City, Kansas 66101 (913-551-7003).

EPA may issue programmatic water quality certification during the authorization period of this permit which ends December 31, 2013. If issued, the Corps of Engineers will announce by public notice and post that certification to the Regulatory Program webpage: <http://www.nwk.usace.army.mil/regulatory/regulatory.htm>.

**SECTION 401 WATER QUALITY CERTIFICATION:** Conditions of any individual or programmatic Section 401 Water Quality Certifications issued by the Missouri Department of Natural Resources (MDNR - for Missouri), Kansas Department of Health and Environment (KDHE - for Kansas), and EPA (for Indian Country) are conditions of this GP. General Condition 5 of the GP states: "If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit."

**ADDITIONAL INFORMATION:** Additional information about this general permit may be obtained by contacting Mr. Douglas R. Berka, Regulatory Project Manager, Kansas City District Regulatory Branch (ATTN: OD-R) 700 Federal Building, Kansas City, Missouri 64106, at 816-389-3657 or via email at [Douglas.R.Berka@usace.army.mil](mailto:Douglas.R.Berka@usace.army.mil). All inquiries concerning this public notice should be directed to the above address.

Enclosure

## DEPARTMENT OF THE ARMY PERMIT

Permittee General Public

Permit No. NWK GP-41

Issuing Office U.S. Army Corps of Engineers, Kansas City District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** To excavate or place fill material for protection and/or repair of existing flood damaged structures, damaged land areas and/or damaged fills as follows:

- a. Repair of levees to existing elevations and cross-section, including breach closures and borrow operations
- b. Bridge embankment protection (armoring) and/or repair
- c. Repair of pre-existing highway or railroad embankments and the addition or repair of stone (armoring) protection
- d. Repair of pre-existing utility protection structures
- e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration
- f. Drainage channel/ditch restoration to pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event
- g. Restoration of creek channels to pre-flooding alignment and capacity
- h. Construction of temporary roads and temporary fills to facilitate the completion of any of the listed activities

Note: Maintenance of existing flood damaged structures and/or flood damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal regulations 33 CFR 320-331. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the appropriate Corps of Engineers District, Regulatory Branch.

**Project Location:** In Waters of the United States, (rivers, lakes, streams, and wetlands) within the State of Kansas, including Indian Country, and within the State of Missouri that are declared flood disaster areas by the Governor of either state and/or the President of the United States.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 2 years from each permit determination. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See continuation sheets, pages 4, 5, and 6 of this document.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- (x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (x) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, or local authorization required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

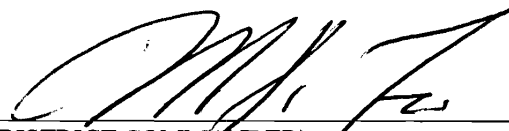
Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

***General Public – Signature Not Required***

\_\_\_\_\_  
(PERMITTEE)

\_\_\_\_\_  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
(DISTRICT COMMANDER)  
ROGER A. WILSON, JR.  
BY: MARK D. FRAZIER  
Chief, Regulatory Branch  
Operations Division

21 March 2008  
\_\_\_\_\_  
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEREE)

\_\_\_\_\_  
(DATE)

### Special Conditions:

- a. You must sign and return the attached "Compliance Certification" after the authorized work and any required mitigation is completed. Your signature will certify that you completed the work in accordance with this permit, including the general and the special conditions, and that any required mitigation was completed in accordance with the permit conditions.
- b. **(Activities occurring in navigable waters under Section 10 of the Rivers and Harbors Act of 1899 Only)** The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- c. If any part of the authorized work is performed by a contractor, before starting work you must discuss the terms and conditions of this permit with the contractor; and, you must give a copy of this entire permit to the contractor.
- d. You must contact the Corps of Engineers, submit application materials outlined in Appendix I, and you must submit a mitigation plan prior to completing any flood recovery/repair activity when the repair involves obtaining borrow from forested wetland, borrowing material from potential migratory bird nesting areas, clearing trees along stream channels, working in areas with known exotic species, and/or if the proposed repair activity includes restoration of a stream channel back to the original, pre-flood location. All other flood repair activities, including all repairs supervised by the Corps of Engineers, pursuant to Public Law 84-99 and/or all repairs supervised by the United States Department of Agriculture, pursuant to the Emergency Watershed Protection Program or to the Emergency Conservation Program can be completed without pre-construction notification to the Corps of Engineers. However, all completed flood repair work, authorized by this permit, must be reported to the Corps of Engineers, Regulatory Branch, within 60 days of completing the project. The report must include the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed.
- e. You must NOT dredge or excavate from the Missouri River or from the Kansas River in order to obtain borrow material for any flood repair project authorized by this permit.
- f. You must employ measures to prevent spilled fuels, lubricants, excessive suspended solids including dredged material, and/or wet concrete from entering the waters of the United States and formulate a contingency plan to be effective in the event of a spill.
- g. You must use clean, uncontaminated materials for fill in order to minimize excessive turbidity by leaching of fines, as well as to preclude the entrance of deleterious and/or toxic materials into the waters of the United States by natural runoff or by leaching. Use of small aggregate material less than 20 lbs per aggregate, such as creek gravel, for stabilization and erosion control is prohibited.
- h. You must excavate or fill in the watercourse so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation. Activities should be conducted during low water periods and outside major spawning season for fish, unless a waiver is obtained from the Corps of Engineers. Crossings of waterways and use of construction machinery in waterways should be limited to the minimum extent necessary.
- i. You must immediately remove and properly dispose of all debris during every phase of the project in order to prevent the accumulation of unsightly, deleterious and/or toxic materials in or near the water body. All construction debris must be disposed of in an upland site, outside the floodplain, and in such a manner that it cannot enter into a waterway or into a wetland.
- j. You must store all construction materials, equipment, and/or petroleum products, when not in use, above anticipated high water levels.

### Special Conditions (continued):

- k. You must restrict the clearing of timber and other vegetation to the absolute minimum required to accomplish the work. You must avoid the removal of mature trees to prevent potential impacts to bald eagle roost sites. Work should be limited to one side of the channel only. However, work from both sides of the channel is permitted if it is demonstrated that it results in minimizing tree clearing. Vegetated riparian buffer areas should be included along both sides of any channel restoration projects. All wooded areas cleared for site access must be allowed to return to forested habitat. Mitigation may be required for other timber clearing.
- l. Upon completion of earthwork operations, you must seed, replant or otherwise protect from erosion all fills in the water or on shore, and other areas on shore disturbed during construction. If seeding does not successfully stabilize the disturbed soil areas by the end of the first growing season, you must implement alternate measures, such as placing riprap, slope terracing with untreated railroad ties, gabions or concrete blocks, or additional vegetative plantings, to protect the disturbed areas from further erosion. Clearing, grading, and replanting should be planned and timed so that only the smallest area is in a bare soil condition. You must contact the Corps of Engineers prior to beginning work on any additional erosion control measures so that we can determine if additional authorization is required.
- m. You must dispose of excess concrete and wash water from concrete trucks and other concrete mixing equipment in an upland area above the ordinary high water mark and at a location where the concrete and wash water cannot enter the water body or an adjacent wetland area.
- n. You must not dispose of any construction debris or waste materials below the ordinary high water mark of any water body, in a wetland area, or at any location where the materials could be introduced into the water body or an adjacent wetland as a result of runoff, flooding, wind, or other natural forces.
- o. You must use only graded rock, quarry-run rock and/or clean concrete rubble for riprap. The material must be reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces. Generally, the maximum weight of any piece should not be more than 500 pounds. Gravel and dirt should not exceed 15% of the total fill volume. If you use concrete rubble, you must break all large slabs to conform to the well graded requirement, and remove all exposed reinforcement rods, trash, asphalt, and other extraneous materials before you place the rubble in the waters of the United States. Size and gradation requirements can be changed provided approval is received from the Corps' Regulatory Branch prior to placement.
- p. You must completely remove all temporary fills, including sand bags (to the extent practicable), in the Waters of the United States within 30 days of the end of the flood emergency and disposed of in accordance with special condition "h" above, unless the temporary fill is to be incorporated in the final repair of the structure. If sand bags are needed for a longer duration until permanent repairs are made, you must request a waiver of this condition in writing. Temporary construction of levees to protect agricultural land in areas where no levees previously existed, are not authorized.
- q. You must avoid impacts to wetlands to the fullest extent practicable. When wetlands impacts are unavoidable, borrow site selection will be based on the following order of preference: upland (non-wetland) sources, areas riverward of the levee previously used for borrow, open prior converted cropland, farmed wetlands, or other authorized excavation sites. You must mitigate for all unavoidable proposed wetland excavation or fill activities authorized by this permit. You must develop mitigation plans on a case-by-case basis which must be approved by the Corps. This permit does not authorize actions designed to drain or otherwise convert wetlands to other uses, nor actions where a practicable alternative to impacting wetlands is available unless the Corps of Engineers, in consultation with other resource agencies, determine that sediment removal from existing wetlands will restore wetland functions and create valued habitat diversity. All borrow areas should have 5:1 horizontal to vertical side slopes and the water depth should be three feet deep or less under normal circumstances.
- r. You must place all fills and structures such that they do not result in stream channel constriction or in redirection of flows in such a way as to cause upstream or downstream erosion. Channelization projects or shortening of waterways, other than restoration of creek channels to pre-flood alignment, are not authorized.
- s. You must not undertake actions that are likely to jeopardize the existence of a threatened or endangered species or a species proposed for such designation as defined in the Federal Endangered Species Act, nor actions which are likely to destroy or adversely modify the critical habitat of such species. If the project requires the removal of mature **trees along stream** channels or from forested wetland you must contact the Corps of Engineers prior to any tree clearing activity.



**Special Conditions (continued):**

t. You must avoid activity in the proximity of a property listed in or eligible for listing in the National Register of Historic Places unless, after coordination with the State Historic Preservation Office of the affected state and/or the Advisory Council on Historic Preservation, a determination of "no effect" or "no adverse effect" is made in accordance with criteria established by 36 CFR 800. If an inadvertent discovery of any cultural or archaeological resource occurs you must immediately contact this office and you should suspend work in the area until a determination of eligibility for listing on the National Register of Historic Places is completed and any necessary consultation under Section 106 of the National Historic Preservation Act is completed.

u. You must not undertake any activity that results in a new structure or replacement of a previously authorized structure with an increase in scope or design of the original structure. Small changes that do not affect elevations, such as the reconstruction of a levee around a scour hole at pre-existing elevations, and that do not convert wetland to upland (non-wetland) or a different wetland use beyond what is unavoidable such as to go around a scour hole, may be authorized upon notification to the Corps. Levee breach repairs constructed on new alignments must be setback farther from the stream channel than the original alignment.

v. You must contact the Missouri Department of Natural Resources, Water Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, or the Kansas Department of Health and Environment, Bureau of Water, Curtis State Office Building, 1000 Southwest Jackson, Topeka, Kansas 66612, in order to determine the need for a state permit for land disturbance, return water, or other activities that normally require such permits. Use of GP-41 shall not be construed or interpreted to imply the requirements for other permits are replaced or superseded. Any national pollutant discharge elimination system (NPDES) permits, general permits for land disturbance, or other requirements shall be complied with.

w. You must notify the Corps of Engineers if one of the following common exotic species occurs in the project area. The zebra mussel (*Dreissena polymorpha*), Eurasian watermilfoil (*Myriophyllum spicatum*), purple loosestrife (*Lythrum salicaria*), Johnson grass (*Sorghum halepense*), sericia lespedeza (*Lespedeza cuneata*), salt cedar (*Tamarix spp.*), and reed canary grass (*Phalaris arundinacea*). You must take appropriate actions to insure the prevention of the spread of any exotic species. The following best management practice can help prevent the spread of these species. Equipment brought on the project site should be washed to remove dirt, seeds and plant parts. If the equipment has been used in a body of water in the last 30 days it can be washed at a commercial car wash or dried for five or more days before using the equipment in another body of water. In addition, before transporting equipment from the project site visible water, mud, plants and animals should be removed. Waters that the zebra mussel is known to inhabit in Kansas and in Missouri can be found at the following website:

<http://nas.er.usgs.gov/queries/zmbyst.asp>

x. For activities occurring in Indian Country, you must request and obtain individual Section 401 Water Quality Certification from the Environmental Protection Agency (EPA). You may contact the EPA by writing US EPA, Region 7 Tribal Coordinator, 901 North 5th Street, Kansas City, Kansas 66101, or by calling (913) 551-7498. You must receive Section 401 Water Quality Certification, and comply with the conditions of that certification, during performance of any work under this permit. Should EPA issue programmatic certification for this GP during the term of the GP, the Corps will issue a supplemental public notice and General Condition 5 of the permit applies.

## APPENDIX I

### Criteria for Authorization by General Permit NWKGP-41

1. This general permit authorizes activities proposed by the general public, railroads, transportation departments, pipeline and utility companies, and government agencies.
2. If you propose to work under the authority of this General Permit and the project requires preconstruction notification as outlined in special condition "d" of the permit, you must notify the appropriate Corps of Engineers district within 18 months of the end of the flood emergency (when the nearest river gauge drops below flood stage for two months), and receive authorization prior to starting work in the Corps jurisdiction. You must submit the following information:
  - a. A completed application form ENG 4345 or a letter which includes all information required by form ENG 4345. The ENG 4345 is available at: [www.nwk.usace.army.mil/regulatory/regulatory.htm](http://www.nwk.usace.army.mil/regulatory/regulatory.htm)
  - b. You must clearly describe the proposed work so we can clearly and readily determine whether or not the proposed work complies with the General Permit.
  - c. The flood repair activities must be in counties declared disaster areas by the Governor of the State of Kansas, the Governor of the State of Missouri and/or the President of the United States.
  - d. An 8 1/2" x 11" drawing(s) showing the details of the proposed work.
  - e. An 8 1/2" x 11" map with the location of the proposed project clearly marked, including the Section, Township, and Range or the Latitude and Longitude location (decidegrees).
  - f. Discussion of possible alternatives and why they were not selected.
  - g. Also, as project proponent, you must send copies concurrently to the following addresses, but we will not necessarily solicit comments from these agencies. We will give these agencies an opportunity to request that we take discretionary authority to require that you apply for an individual permit, if a potential significant problem is identified.

#### 1. For projects in Missouri contact:

U.S. Fish and Wildlife Service  
Columbia Field Office  
101 Park DeVille Drive, Suite A  
Columbia, Missouri 65203  
(573) 234-2132

Missouri Department of Natural Resources  
Water Pollution Control Branch  
P.O. Box 176  
Jefferson City, Missouri 65102  
1-800-361-4827 or (573) 751-1300

U.S. Environmental Protection Agency  
Watershed Planning and Implementation Branch  
901 North Fifth Street  
Kansas City, Kansas 66101.  
(913) 551-7003

Missouri Department of Natural Resources  
Historic Preservation Program  
P.O. Box 176  
Jefferson City, Missouri 65102  
(573) 751-7958

## APPENDIX I (continued)

Missouri Department of Conservation  
Policy Coordination  
P.O. Box 180  
Jefferson City, Missouri 65102-0180  
(573) 522- 5115

\* Federal Emergency Management Agency  
Region VII  
9221 Ward Parkway, Suite 300  
Kansas City, Missouri 64114-3372  
(816) 283-7063

### 2. For projects in Kansas contact:

U.S. Fish and Wildlife Service  
Manhattan Field Office  
2609 Anderson Avenue  
Manhattan, Kansas 66502  
(785) 539-3474

Kansas Department of Health and Environment  
Bureau of Water  
Curtis State Office Building  
1000 Southwest Jackson Street  
Topeka, Kansas 66612  
(785) 296-1500

Kansas Department of Wildlife and Parks  
512 Southeast 25<sup>th</sup> Avenue  
Pratt, Kansas 67124  
(620) 672-5911

\* Federal Emergency Management Agency  
Region VII  
9221 Ward Parkway, Suite 300  
Kansas City, Missouri 64114-3372  
(816) 283-7063

\* You must contact FEMA for all proposed development located in the 100-year floodplain of a National Flood Insurance Program (NFIP) participating community in order to comply with local floodplain management regulations and secure a floodplain development permit from that community.

3. For projects not requiring pre-construction notification, a report of the completed repair activities must be submitted that includes the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed.

4. We may reevaluate the cumulative impacts of this general permit at our discretion at any time. We will reevaluate cumulative impacts at least every five (5) years.

5. The following is a list of flood damaged structures, damaged land areas and/or damaged fills authorized to be repaired under this general permit:

- a. Repair of levees to existing elevations, including breach closures and borrow operations
- b. Bridge embankment protection (armoring) or repair
- c. Repair of pre-existing highway and/or railroad embankments and armor protection
- d. Repair of pre-existing utility protection structures
- e. Placement of rock and/or earth materials for emergency bank protection or restoration

## **APPENDIX I (continued)**

- f. Drainage ditch restoration to pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event
  - g. Restoration of creek channels to pre-flooding alignment, capacity and flow line
  - h. Construction of temporary haul roads to facilitate any of the above listed activities
6. The District Engineer may require an individual permit on a case-by-case basis for any activity authorized herein.
7. You must complete the authorized work within the five year issuance period of the GP. If you need additional time to complete repairs or if flood damage occurs within the last year of the GP applicants must contact the appropriate Corps District for an extension of the authorization to complete the needed work. Contact should be made at least one month in advance of the GP expiration date.
8. Flood repair activities, supervised by the U. S. Army Corps of Engineers, pursuant to Public Law 84-99, and/or supervised by the United States Department of Agriculture, pursuant to the Emergency Watershed Protection Program or the Emergency Conservation Program, do not require notification to the Corps of Engineers, Regulatory Branch. It is the responsibility of these federal agencies to comply with all environmental laws and Presidential Executive Orders.

## COMPLIANCE CERTIFICATION

*Special condition "a" of this permit document requires that you submit a signed certification regarding the completed work and any required mitigation. This certification page satisfies this condition if it is provided to the Kansas City District at the address shown at the bottom of this page upon completion of the project.*

**APPLICATION NUMBER:** General Permit No. 41 (NWK 2007-02078)

**APPLICANT (Enter name and mailing address):**

**PROJECT LOCATION (Enter latitude & longitude (decidegrees) or Section, Township and Range, County, State):**

- a. I certify that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions.
- b. I certify that any required mitigation was completed in accordance with the permit conditions.
- c. Your signature below, as permittee, indicates that you have completed the authorized project as certified in paragraphs a and b above.

\_\_\_\_\_  
(PERMITTEE)

\_\_\_\_\_  
(DATE)

Return this certification to:

U.S. Army Corps of Engineers  
700 Federal Building  
601 East 12<sup>th</sup> Street  
Kansas City, MO 64106-2896  
ATTN: OD-R



Kathleen Sebelius, Governor  
Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH  
AND ENVIRONMENT

[www.kdheks.gov](http://www.kdheks.gov)

Division of Environment

January 31, 2008

Mr. Douglas R. Berka  
U.S. Army Corps of Engineers  
Kansas City Field Office; 700 Federal Building  
601 East 12th Street  
Kansas City, Missouri 64106-2896

Section 401 Water Quality Certification

RE: (2007-0078) PROPOSED REGIONAL GENERAL PERMIT NO. 41 FOR  
EXCAVATION OR PLACEMENT OF FILL MATERIAL FOR THE PERMANENT  
PROTECTION AND/OR REPAIR OF FLOOD DAMAGED STRUCTURES, DAMAGED LAND  
AREAS AND/OR DAMAGED FILLS IN THE STATES OF KANSAS AND MISSOURI.  
PERMITTEES: General Public, Railroads, Transportation Departments, Pipeline and  
Utility Companies and Government Agencies

Dear Mr. Berka:

The Kansas Department of Health and Environment has received your request for  
Section 401 Water Quality Certification. The KDHE has determined the project has the  
following water pollutant discharge sources:

- a. Repair of levees to existing elevations and cross-section, including breach  
closures and borrow operations
- b. Bridge embankment protection (armoring) or repair
- c. Repair of pre-existing highway or railroad embankments and the addition or  
repair of stone (armoring) protection
- d. Repair of pre-existing utility protection structures
- e. Placement of rock and/or earth materials for stream/ditch bank protection  
and/or stream/ditch bank restoration

BUREAU OF WATER – WATERSHED MANAGEMENT SECTION  
CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE. 420, TOPEKA, KS 66612-1367

Voice 785-296-4195 Fax 785-296-5509

<http://www.kdheks.gov/nps/index.html>

f. Drainage ditch restoration to pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event

g. Restoration of creek channels to pre-flooding alignment and capacity

h. Construction of temporary haul roads to facilitate the completion of any of the listed activities

Discharges from these sources if not minimized or otherwise controlled may cause violations of the provisions of Kansas Water Quality Standards found at KAR 28-16-28 et seq.

Pursuant to Section 401 and KAR 28-16-28(c) the Kansas Department of Health and Environment finds this project will not result in a violation of Kansas Water Quality Standards and herewith issues a Water Quality Certification for execution and subsequent operation of the project subject to the following conditions:

- I. Limitations of this Certification:** All Section 404 activities within the borders of Indian owned and operated lands are not covered by this certification. Individuals proposing projects which impact those waters are responsible for contacting the appropriate individual at the following numbers:

Prairie Band Pottawatomie Indians, Planning Department, 785/966-2946

Kickapoo Tribe in Kansas, Environmental Office, 785/486-2601

Iowa of Tribe of Kansas and Nebraska, 785/595-3258

Sac and Fox Tribe of Missouri, 785/742-4707

Environmental Protection Agency Region VII Indian Lands Contact,  
913/551-7498

**II.**

**General Conditions**

1. **Certification Retention:** The applicant shall retain this water quality certification on the project site through the duration of the project to accommodate inspection.
2. **Kansas Water Pollution Control General Permit for Stormwater Runoff from Construction Activities:** This certification does not relieve the applicant of the responsibility to determine if the project is subject to the requirements of **General NPDES Permit** and to secure such permit as necessary. Questions and inquiries may be directed to:

Mr. Larry Hook  
Kansas Department of Health and Environment  
Bureau of Water Industrial Program Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
Phone 785/296-5549; FAX:785/296-5509  
[www.kdheks.gov/stormwater](http://www.kdheks.gov/stormwater)

3. **Project Water Quality Protection Plan:** Any person wishing to use a Section 404 GP 41 Permit shall prepare and follow a written project water quality protection plan (PWQPP.) The PWQPP shall identify components of the permitted activity (i.e. solid waste handling, fuel storage and leaks, sediment from construction etc.) which may or will result in the discharge of pollutants to waters of the state. For each component which may discharge pollutants to waters of the state, the plan shall set out the physical, structural and management measures to be implemented to prevent or minimize the discharge of pollutants to waters of the state. (Activities requiring a construction stormwater permit, as described above, also require a stormwater pollution prevention plan which will serve as the PWQPP.)

**The permittee is required to submit the PWQPP to KDHE only if the project impacts Outstanding National Resource, Exceptional State or Special Aquatic Life Use Waters per condition #4 below.**

- 4 **Outstanding National Resource Waters, Exceptional State and Special Aquatic Life Support Use Waters:** In the event the permitted activity occurs in or within one half (2) mile of an Outstanding National Resource Water as defined pursuant to **K.A.R. 28-16-28b(pp)** and **K.A.R. 28-16-28c(a)B(3)**, an Exceptional State Water pursuant to **K.A.R. 28-16-28b(y)** and **K.A.R. 28-16-28c(a)B(2)**, or a Special Aquatic Life Support Use Water designated pursuant to **K.A.R. 28-16-28d(b)(2)(A)**, the person responsible for initiating the activity shall submit a copy of the PWQPP to:

Kansas Department of Health and Environment  
Bureau of Water - Watershed Management Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
[nps@kdhe.state.ks.us](mailto:nps@kdhe.state.ks.us)

A table and state map of **Outstanding National Resource Waters, Exceptional State and Special Aquatic Life Support Use Waters** can be found at:  
<http://www.kdheks.gov/nps/resources/specwaterinfo.pdf> .



The permittee should also be aware of the following Kansas water quality protection regulations associated with special waters:

**K.A.R. 28-16-28c(a)B(2)**-AWherever state surface waters constitute exceptional state waters, discharges shall be allowed only if existing uses and existing water quality are maintained and protected.@

**K.A.R. 28-16-28c(a)B(3)**-AWherever state surface waters constitute an outstanding national resource water existing uses and existing water quality shall be maintained and protected. New or expanded discharges shall not be allowed into outstanding national resource waters.@

5. **Solid Waste Disposal:** All solid waste materials produced during the execution of the project shall be disposed in accordance with the provisions of Kansas Solid Waste Management Statutes and regulations and applicable local regulations. Direct inquiries to:

KDHE, Bureau of Waste Management  
1000 SW Jackson Street, Suite 320  
Topeka, Kansas 66612-1366  
Phone: 785/296-1600; FAX: 785/296-1592  
[www.kdhe.state.ks.us/waste/index.html](http://www.kdhe.state.ks.us/waste/index.html)

6. **Equipment Staging Areas and Project Closure:** Upon completion of the project, disturbed areas shall be expeditiously stabilized with temporary and permanent vegetation, bio-artificial ground cover or other appropriate non-polluting material. Fertilizer application to establish and maintain vegetation shall be done in a manner that will not contribute to the current nutrient load to any of the surface waters impacted by the project. The person responsible for the permitted activity shall monitor and maintain cover materials until such time as the site is stabilized. Project closure procedures shall be documented in the Project Water Quality Protection Plan per condition No. II. 3.
7. **Riparian Areas:** Minimize removal or disturbance of riparian areas (areas adjacent to water bodies). KDHE encourages the use of vegetation consistent with adjoining vegetation materials to minimize impacts from improper handling of fertilizers and pesticides.
8. **Discharge of Floatable Materials:** Pursuant to K.A.R. 28-16-28b (uu)(1), (3) and (4), the person responsible for executing the permitted activity shall assure good house keeping is practiced at the site to minimize the discharge of floatable materials such as personal refuse including food containers, packing materials, and other litter. Appropriate measures shall be taken to capture and/or recover any floatable materials discharged to waters of the state originating with the permitted project.

9. **Fuel, Chemical and Materials Storage:** Fuel, chemical and other materials stored at the project site shall be stored in a manner that minimizes the discharge of product to waters of the state. Spill minimization and prevention measures and procedures shall be documented in the Water Quality Protection Plan.
10. **Spill Response and Reporting:**
  - 1.) **Spill response and cleanup:** In the event a spill of fuel, chemical or other water quality degrading materials stored or transported on the site occurs, the permittee shall or with the assistance of professional response personnel, expeditiously control or contain the spill and initiate clean up procedures. The applicant shall immediately contact 911. Spill response and cleanup actions shall be documented in the PWQPP. The applicant should also contact the appropriate Kansas Department of Health and Environment [www.kdhegov/befs/#districts](http://www.kdhegov/befs/#districts) or look in your local phone directory) to confirm cleanup activities. Finally, KDHE strongly encourages the permittee to establish and post a sign that includes phone contact numbers for the appropriate local emergency response unit, KDHE district office, and the project manager/owner.
  - 2.) **Reporting:** The Kansas Department of Health and Environment shall be notified of all fuel spills or unauthorized discharge of pollutants immediately. Contact KDHE at 785/296-1679, anytime for spill reporting requirements. The Kansas Adjutant Generals Office should also be contacted (785/296-8013) as well as the National Spill Response Center (1-800-424-8802).
11. **Drinking Water Intakes:** The person responsible for the permitted activity shall avoid adverse impacts on public water supplies. Whenever permitted activities occur within one mile upstream of a public drinking water supply - surface water intake, the applicant shall contact the official in charge of the public drinking water supply to apprise the drinking water supply official of the permitted activity. The person responsible for the permitted activity shall consider the suggestions and recommendations of the public water supply official when preparing the PWQPP.
12. **Treated Wastewater Effluent Mixing Zones:** As a general guideline any Section 404 activity within one-half (2) mile upstream or one-half (2) mile downstream of a permitted wastewater effluent discharge may impact the effluent mixing zone. The person responsible for the permitted activity shall determine if the project will adversely impact the wastewater effluent mixing zones and take appropriate measures to avoid altering or changing the mixing zone. This may include but is not limited to:

- 1) The construction or placement of a recreation oriented facility or structure (i.e. boat ramp, walkway) which may require modification of the beneficial use designation to accommodate contact or non-contact recreation, thereby increasing the effluent limitations for the permit.
- 2) Any activity which may alter or remove the stream channel geometry or natural oxygenation abilities of the stream such as bridge construction, channelization, stream channel substrate modification etc.

The person responsible for the permitted Section 404 activity shall advise and describe to the waste water discharge permittee and KDHE any potential mixing zone impacts and the measures the person responsible for the Section 404 activity will take to minimize adverse impacts on the mixing zone. Inquiries should be directed to:

Kansas Department of Health and Environment  
Bureau of Water - Municipal Programs Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
Phone: 785/296-5527; FAX: 785/296-5509

13. **Total Maximum Daily Load:** Any Section 404 activity within a watershed with a Total Maximum Daily Load (the amount of pollution a water body can receive and maintain its designated uses: see <http://www.kdheks.gov/tmdl/index.htm>) is strongly encouraged to contact the assigned KDHE watershed field coordinator. A service area map for the three watershed field coordinators is attached (see [www.kdheks.gov/nps](http://www.kdheks.gov/nps)) once construction is started.

### III. Special Conditions for Specific Nationwide Permits

1. **Outfall Structures and Maintenance (construction):**  
Controls shall be in place to stabilize all areas of the bed and bank around the pipe or adjacent to the outfall structure and associated intake structures that may be affected by outfall or stream flows, respectively.
2. **Maintenance; Utility Line Activities; and -Minor Discharges (pipelines included):**  
Hydrostatic tests for pipeline activities shall be approved prior to discharge of water used for the test. Please contact:

Kansas Department of Health and Environment  
Bureau of Water - Industrial Program Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
Phone 785/296-5553; FAX: 785/296-5509

3. **Aquatic Habitat, Restoration, Establishment and Enhancement Activities and Stormwater Management Facilities):** Measures shall be implemented to assure impounded waters, created by activities within the framework of these permits, avoid becoming public health threats, nuisances, generate complaints, and potentially discharge degraded water. The applicant shall prepare and implement an Operations and Maintenance Plan for Facilities and Landscapes (O&M), which at the minimum incorporate the following:
  - A. Identify individual and public property owners and their potential for being the source of nonpoint source pollution. This could include but is not limited to: commercial grounds, streets, right-of-ways, parking areas, conservation easement and **proposed** mitigation areas etc.
  - B. For each property as described in item A. above, water quality protection measures for each category of artificial source of pollution identified. The identified water quality protection measure for each category of artificial source of pollution shall be designed to *reduce to the maximum extent practicable, the level of pollution resulting from identified pollutant sources*. Identified water quality protection quality protection measures shall be at least as effective as those set out by the Kansas Nonpoint Source Pollution Management Plan (<http://www.kdheks.gov/nps/resources/2000update.pdf>), prepared and maintained by the Kansas Department of Health and Environment.
  - C. Strategies to assure implementation of the water quality protection measures identified under item II. 3-10 which may include but are not limited to prohibition or restriction of activities, utilization of alternative technologies or products, information and education, financial assistance, technical assistance, enforcement and penalties. Additionally, an in-house reporting form used by staff to document degraded property conditions potentially impacting the property and needs to address them should be developed, if applicable.
  - D. Organizations and individuals responsible for assuring implementation of the identified water quality protection measures.

#### **IV. Enforcement and Penalties**

This certification does not relieve the applicant of the responsibility for any discharge to waters of the state or allow for any inappropriate discharge to occur. As provided for by K.S.A. 65-171(f), failure to comply with the conditions of this certification may subject the responsible party to fines of \$10,000 per violation with each day the violation occurs constituting a separate violation.

**V. Variance**

If the applicant believes the conditions of this certification will result in impairment of important widespread social and economic development, the applicant is advised of the variance provisions of KAR 28-16-28b(III) and KAR 28-16-28f(e).

**VI. Additional Information**

The KDHE website contains the following information to assist the applicant in preparing a project water quality protection plan:

\*Construction practices: <http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm>

\*Project Water Quality Protection Plan Form and Instructions:  
<http://www.kdheks.gov/nps/resources/nwpwqppfrm.doc> or  
<http://www.kdheks.gov/nps/resources/nwpwqppfrm.pdf>

\*Kansas Surface Water Register:  
[http://www.kdheks.gov/befs/download/Current\\_Kansas\\_Water\\_Register.pdf](http://www.kdheks.gov/befs/download/Current_Kansas_Water_Register.pdf)

\*Kansas Surface Water Maps:  
[http://www.kdheks.gov/befs/download/2006\\_Surface\\_Water\\_Register\\_Maps.pdf](http://www.kdheks.gov/befs/download/2006_Surface_Water_Register_Maps.pdf)

Surface Water Quality Standards- [http://www.kdheks.gov/water/28\\_16\\_28b\\_g.pdf](http://www.kdheks.gov/water/28_16_28b_g.pdf)

\*KDHE District Offices- <http://www.kdheks.gov/directions/index.html>

The Kansas Department of Health and Environment, Bureau of Water-Watershed Management Section at: 785/296-4195 or FAX 785/296-5509. This information can also be obtained by written communication directed to:

Kansas Department of Health and Environment  
Bureau of Water - Watershed Management Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367 or email: [nps@kdhe.state.ks.us](mailto:nps@kdhe.state.ks.us)

STATE OF MISSOURI      Matt Blunt, Governor • Doyle Childers, Director  
**DEPARTMENT OF NATURAL RESOURCES**

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www.dnr.mo.gov

**FEB 25 2008**

Colonel Roger A. Wilson, Jr.  
U.S. Army Corps of Engineers  
Kansas City District  
601 E. 12<sup>th</sup> Street, Suite 700  
700 Federal Building  
Kansas City, MO 64106-2896

GP-41 Statewide  
NWKGP-41/PN07-2078/CEK004650

RE: GP 41, All Districts

Dear Colonel Wilson:

The Missouri Department of Natural Resources' Water Protection Program (department) has reviewed Public Notice General Permit (GP) 41 (PN07-588) CEK004650 in which the applicant proposes to issue regional GP-41 to authorize certain discharges of dredged or fill material in conjunction with the permanent protection and/or repair of flood damaged structures, damaged areas, and/or damaged fills in waters of the United States within the states of Missouri and Kansas.

The proposed General Permit would be applicable to all Army Corps of Engineers' Districts in Missouri (Kansas City - 2007-2078/GP-41; Little Rock - 2008-00066/GP-41, Memphis - 2007-588/GP-41; Rock Island - 2007-2061/GP-35; and St. Louis).

These projects are located along the Missouri River throughout Missouri. The Missouri River is a 303(d) listed water and caution shall be exercised not to negatively impact those sections of the river that are already impaired.

This office certifies that the proposed project will not cause the general or numeric criteria to be exceeded nor impair beneficial uses established in the Water Quality Standards, 10 CSR 20-7.031, provided the following conditions are met:

1. This general permit shall not be used for channelization or channel modification purposes.
2. Only the repair of structures due to flood damage are authorized with this permit. The construction of new structures will need additional review and issuance of a separate water quality certification.
3. Representatives from the department shall be allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the letters and conditions of the permit.



Recycled Paper

4. Care shall be taken to keep machinery out of the waterway as much as possible. Fuel, oil and other petroleum products, equipment and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent floodway beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent water bodies as a result of this operation.
5. Petroleum products spilled into any water body or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly.
6. Only clean, nonpolluting fill shall be used. The following materials are not suitable for bank stabilization and shall not be used due to their potential to cause violations of the general criteria of the Water Quality Standards, 10 CSR 20-7.031 (A) – (H):
  - a. Earthen fill, gravel, broken concrete where the material does not meet the specifications outlined below, and fragmented asphalt, since these materials are usually not substantial enough to withstand erosive flows;
  - b. Concrete with exposed rebar;
  - c. Tires, vehicles or vehicle bodies, construction or demolition debris are solid waste and are excluded from placement in the waters of the state;
  - d. Liquid concrete, including grouted riprap, if not placed as part of an engineered structure; and
  - e. Any material containing chemical pollutants (for example: creosote or pentachlorophenol).

Recycled or broken concrete may be used provided that it is reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces. Applicants must break all large slabs to conform to the well-graded requirement. Generally, the maximum weight of any piece shall not be more than 500 pounds. Gravel and dirt shall not exceed 15 percent of the total fill volume. All protruding reinforcement rods, trash, asphalt and other extraneous materials must be removed from the broken concrete prior to placement.

Recycled or broken concrete being used simply as fill need not conform to the well-graded requirement. It shall, however, be free from extraneous materials and shall be placed to eliminate voids within the fill.

7. Clearing of vegetation/trees shall be the minimum necessary to accomplish the activity. A vegetated corridor shall be maintained from the high bank on either side of the jurisdictional channel to protect water quality and to provide for long-term stability of the stream channel, unless physical barriers prevent such a corridor.
8. The riparian area, banks, etc., shall be restored to a stable condition to protect water quality as soon as possible. Seeding, mulching and needed fertilization shall be within three days

of final contouring. On-site inspections of these areas shall be conducted as necessary to ensure successful re-vegetation and stabilization, and to ensure that erosion and deposition of soil in waters of the state is not occurring from these projects.

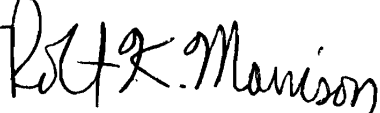
9. Best Management Practices shall be used during construction and/or repair to limit the amount of sedimentation into adjacent water bodies.
10. Temporary fills shall be removed promptly and the fill site restored immediately following construction.
11. The attendant Water Quality Certification for this permit shall not be construed or interpreted to imply the requirements for other permits are replaced or superceded. Any National Pollutant Discharge Elimination System (NPDES) Permits, Land Disturbance General Permits, or other requirements shall be complied with.
12. After avoidance and minimization for projects, impacts must be compensated for. Mitigation for the loss of aquatic stream resources shall be in conformance with the *Missouri Stream Mitigation Method*. This document may be found at the following link:  
[www.mvs.usace.army.mil/permits/permits.asp](http://www.mvs.usace.army.mil/permits/permits.asp).

You may appeal to have the matter heard by the administrative hearing commission. To appeal, you must file a petition with the administrative hearing commission within thirty (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission.

Water Quality Standards must be met during any operations authorized by these permits. If you have any questions, please contact Ms. Carrie M. Schulte of the NPDES Permits and Engineering Section by phone at (573) 751-7023, by e-mail at [carrie.schulte@dnr.mo.gov](mailto:carrie.schulte@dnr.mo.gov), or by mail at Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65109.

Sincerely,

WATER PROTECTION PROGRAM



Robert K. Morrison, P.E., Chief  
Water Pollution Control Branch

RKM:csp



- c: Mr. Bill Goodwin, Missouri Department of Conservation  
Mr. Doyle Brown, Missouri Department of Conservation  
Ms. Janet Sternburg, Missouri Department of Conservation  
Mr. Mike Smith, Missouri Department of Conservation  
Mr. Stuart Miller, Missouri Department of Conservation  
Mr. Doug Berka, Army Corps of Engineers, Kansas City District  
Mr. Keith McMullen, Army Corps of Engineers, St. Louis District  
Mr. Larry Watson, Army Corps of Engineers, Memphis District  
Mr. Wayne Hannel, Army Corps of Engineers, Rock Island District  
Army Corps of Engineers, Kansas City District; MO State Regulatory Office  
Army Corps of Engineers, Kansas City District, Truman Satellite Office  
Army Corps of Engineers, Little Rock District  
Mr. Carl Stevens, U.S. Environmental Protection Agency  
Mr. Rick Hansen, U.S. Fish and Wildlife Service  
DNR – KCRO, SLRO, NERO, SERO, SWRO

## **Missouri State Historic Preservation Office Coordination**

# CULTURAL RESOURCE ASSESSMENT

## Section 106 Review

CONTACT PERSON/ADDRESS

C:

Timothy Meade, District Archaeologist  
Corps of Engineers, Kansas City District  
700 Federal Building  
Kansas City, Missouri 64106-2896

Joe Cothern, EPA

PROJECT:

Saline County Levee Emergency Repairs

FEDERAL AGENCY

COE

COUNTY:

SALINE

The State Historic Preservation Office has reviewed the information submitted on the above referenced project. Based on this review, we have made the following determination:

☐

After review of initial submission, the project area has a low potential for the occurrence of cultural resources. A cultural resource survey, therefore, is not warranted.

☒

Adequate documentation has been provided (36 CFR Section 800.11). There will be "no historic properties affected" by the current project.

☐

An adequate cultural resource survey of the project area has been previously conducted. It has been determined that for the proposed undertaking there will be "no historic properties affected".

For the above checked reason, the State Historic Preservation Office has no objection to the initiation of project activities. PLEASE BE ADVISED THAT, IF THE CURRENT PROJECT AREA OR SCOPE OF WORK ARE CHANGED, A BORROW AREA IS INCLUDED IN THE PROJECT, OR CULTURAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, APPROPRIATE INFORMATION MUST BE PROVIDED TO THIS OFFICE FOR FURTHER REVIEW AND COMMENT. Please retain this documentation as evidence of compliance with Section 106 of the National Historic Preservation Act, as amended.

By: Mark A. Miles  
Mark A. Miles, Deputy State Historic Preservation Officer

October 3, 2008  
Date

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
STATE HISTORIC PRESERVATION OFFICE  
P.O. Box 176, Jefferson City, Missouri 65102

For additional information, please contact Judith Deel, (573) 751-7862. Please be sure to refer to the project number 010-SA-08